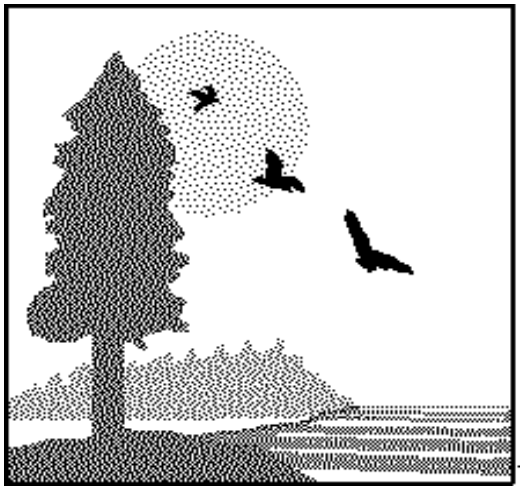
# CALIFORNIA STATE LANDS COMMISSION
# MARINE FACILITIES DIVISION



# SUMMARY OF API 570 STANDARDS APPLICABLE TO SECTION 2570
# TITLE 2, DIVISION 3, CHAPTER 1, ARTICLE 5.5
# CALIFORNIA CODE OF REGULATIONS

# PREVENTATIVE MAINTENANCE PROGRAM AS APPLICABLE TO MARINE TERMINAL OIL PIPELINES

# API 570 STANDARDS AS APPLIED TO MARINE TERMINAL OIL PIPELINES

***The Preventive Maintenance Program referenced in 2 CCR Section 2570 refers to applicable requirements and guidelines prescribed in API American Petroleum Institute 570, Piping Inspection Code (API 570).***

***The following is a summary of the applicable Sections of API 570 that pertain to Marine Oil Terminals regulated by the California State Lands Commission. The intent of this summary is to provide useful guidance for determining inspection and maintenance requirements under API 570 in compliance with 2 CCR 2570. <u>This summary provides basic information only.</u> For further detail, please refer to the full text of both API 570 and 2 CCR 2570.***

**<u>Scope and Application, Section 1</u>**

*API 570 applies to in-service metallic piping systems used for the transport of petroleum products.*

**<u>Owner/Operator Responsibilities, Sections 4.31</u>**

*An owner/operator organization is responsible for developing, documenting, executing, and assessing piping inspection systems and inspection procedures that will meet the requirements of API 570. These systems and procedures will be contained in a quality assurance inspection manual or written procedures.*

**<u>API Qualified Inspector, Section 4.2, 4.3.4</u>**

*An API-authorized piping inspector (inspector) shall be responsible for determining that the requirements of API 570 on inspection, examination and testing are met and shall be directly involved in the inspection activities. Other trained and qualified individuals may assist the inspector in performing the inspection. Personnel performing nondestructive examinations need not be an inspector, but shall meet the requirements of examiner per API 570, Section 3.12. All examination results must be evaluated and accepted by the inspector.*

**Inspector Certification, API 570 Appendix "A"**

*An API 570 authorized piping inspector certificate is issued upon successful completion of an API certification exam as well as meeting all educational and experience requirements. The examination would certify inspectors within the scope of API 570, Piping Inspection Code, Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems. Certification shall remain valid for a period of three years at which time recertification is required.*

**External Visual Inspection of Above Ground Pipelines, Sections 5.3, 5.4.3, 5.11, 6.4**

*Every five years at a minimum, an external visual inspection shall be performed to determine the condition of the pipeline, supports and hardware, connections, deadlegs, expansion joints, insulation system integrity, and painting and coating systems; and check for misalignment, vibration, leakage, and significant differences between pipeline drawings and actual installations.*

**Pipe Wall Thickness Measurements, 5.5, 5.6, 6.5,7.1**

*A thickness measurement survey shall be performed to determine the remaining pipe wall thickness at critical locations in the pipeline system and throughout the pipeline. The survey shall include a representative sampling of thickness measurement locations which includes data for all the various components and orientations (horizontal and vertical) within the piping system. Thickness measurement locations shall be carefully documented to allow repetitive future measurements at the same location. (A thickness measurement survey shall be performed at least triennially per 2 CCR 2570, Or at no more than one-half of the remaining life as determined from corrosion rates calculated per Section 7.1.1, whichever is less.*

**Inspection Data Evaluation, Analysis, and Recording, Sections 7.1, 7.2,7.4, 7.6**

*The following shall be calculated from thickness measurement data collected: minimum required thickness, maximum allowable working pressure based upon the measured thickness, corrosion rate, and remaining life. Locally thinned areas may be further evaluated (e.g. ASME B31G Manual for Determining the Remaining Strength of Corroded Pipelines or finite element analysis) to justify continued service. The owner/operator shall maintain appropriate permanent and progressive records of each piping system covered by API 570. Records shall include: piping system service, classification, identification, inspection dates and inspector' name(s) and affiliation(s), all test data, inspection documentation and findings, repairs,*

*alterations, rerating, and other information pertinent to pipeline integrity.*

**Inspection of Buried Pipelines, Sections 9.1.1, 9.1.5, 9.2.6, 9.3.1**

*Every five years at a minimum, the route of buried pipelines shall be examined by an API 570 qualified inspector at the surface and the following conditions shall be noted: change in surface contour of the ground, soil discoloration, or noticeable odor. Cathodically protected piping surveys shall be monitored on an annual basis to assure adequate protection levels; impressed current shall be checked at intervals not to exceed two months (NACE RP 0169 and API RP 651). Significant corrosion detected by pigging or by other means shall require excavation and evaluation. Any coating removed for inspection shall be re-applied.*